IN THE CLAIMS:

Please substitute the following amended, clean versions of the indicated claims (a marked-up version of the changes to the claims is attached to this Amendment):

3. [(amended)] Method in accordance with claim 1, characterized in that the substance (73) is acted upon with at least one fluid jet.

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4. [(amended)] Method in accordance with claim 1, characterized in that the position of the substance (73) in the biore-actor (61) is measured by a sensor (85); and in that the speed of the fluid in the bioreactor (61) is regulated in dependence on the position of the substance (73) in such a manner that the sub-stance (73) is held in flotation in a predetermined position.

5. [(amended)] Method in accordance with claim 1, char-acterized in that a downward flow of the fluid which flows in the direction of gravitation is produced in the bioreactor (61) in addi-tion; and in that a gaseous fluid, in particular air or oxygen, is led in into this downwardly flowing fluid.

A4

9. [(amended)] Bioreactor (61) in accordance with claim 7, character-ized in that the first flow chamber (66a) is designed to widen upwardly.

A5

11. [(amended)] Bioreactor (61) in accordance with claim 7, characterized in that at least one fluid line (76b) opens into the first flow chamber (66a), preferably from below or arranged later-ally with respect to the flow chamber (66a).

12. [(amended)] Bioreactor (61) in accordance with claim 7, characterized in that at least one fluid guiding means (66) is ar-ranged in the container (62) which forms the first flow chamber (66a), with the fluid guiding means (66) being designed such that the first flow chamber (66a) widens upwardly.

A6

16. [(amended)] Bioreactor (61) in accordance with claim 13, characterized in that the hollow body (66b) is formed in the shape of truncated circular cone.

17. [(amended)] Bioreactor (61) in accordance with claim 7, characterized in that the container (62) has at least one closeable opening (62c) above.

A7

19. [(amended)] Bioreactor (61) in accordance with claim 17, characterized in that the closeable opening (62c) is arranged above the first flow chamber (66a).

A7

20. [(amended)] Bioreactor (61) in accordance with claim 7, characterized in that the fluid conveying apparatus (65) is ar-ranged outside the container (62) and is connected in a fluid guiding manner via lines (70, 71) to the container (62).

21. [(amended)] Bioreactor (61) in accordance with claim 7, characterized in that the fluid conveying apparatus (65) comprises a fluid conveying means (65c), in particular a vaned wheel; and in that the fluid conveying means (65c) is arranged inside the con-tainer (62).

A8

24. [(amended)] Bioreactor (61) in accordance with ~~claim 22~~, characterized in that the fluid conveying apparatus (65) comprises a magnetic coupling drive which is designed to be adapted for cou-pling to the rotatable motor part (65b).

25. [(amended)] Bioreactor (61) in accordance with claim 22, characterized in that the rotatable motor part (65b) of the electric motor is journalled at least with respect to one degree of freedom with actively or passively magnetically acting means.

A9

27. [(amended)] Bioreactor (61) in accordance with claim 1, characterized in that a second flow chamber (66f) is ar-ranged above the first flow chamber (66a) and is designed in such a way that the fluid flowing from the top to the bottom therein has a smaller speed with decreasing height.